from 8.98 ± 1.44% to 7.91 ± 1.19% , decrease in BMI 0.26 ± 1,36 kg/m^2 and reduction in major and minor hypoglycemic events by 97% and 80% respectively. Probabilities of complications, management costs adjustments (including complications) were derived from the Czech surveys from 2007. Treatment costs were from June 2009. Future costs and clinical benefits were discounted at 3.5 % per annum. **RESULTS:** The short-term benefits of switching from BHI 30 to BIAsp 30 are projected to lead to an increase in discounted quality-adjusted life expectancy of 0.493 years (4191 ± 0.090 versus 3698 ± 0.078). Increased total lifetime costs/patient is -CZK122,594 (534,259 ± 1,9925 versus 65,7212 ± 21,908) with BIAsp 30. Combining costs and clinical outcomes results in an incremental cost-effectiveness per quality-adjusted life year (QALYs) gained were dominant. **CONCLUSIONS:** CORE diabetes T2 patients sub-cohort simulation in 35 years perspective Czech observational study has demonstrated acceptable cost-effectiveness for patients with type 2 diabetes treated BIAsp 30. BIAsp 30 treatment was projected to be associated with improvements in life expectancy, QALYs and cost saving compared to BHI 30. Sensitivity analyses show cost-effectiveness result to be robust.

PDB25

A PATIENT-LEVEL SIMULATION MODEL FOR ECONOMIC EVALUATION OF CINACALCET IN THE TREATMENT OF SECONDARY HYPERPARATHYROIDISM (SHPT) IN ITALY

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OBJECTIVES: Imbalanced levels of parathyroid hormone (PTH), serum calcium (Ca) and phosphorus (P) are associated with an increased risk of cardiovascular death and fracture. Cinacalcet can regulate these levels in patients with SHPT. Here we describe a cost-utility analysis of cinacalcet treatment in SHPT patients in Italy. **METHODS:** We developed a probabilistic patient-level simulation Markov model to simulate the effect of cinacalcet on individual Ca, P, and PTH levels (based on data of a European multicenter, open-label study); to correlate these levels with mortality and morbidity (cardiovascular events, fractures, and parathyroidectomies) recently published in two reviews; and to incorporate Italian data for dialysis patients and national cost structure. Simulation horizon was patient lifetime; simulated treatment alternatives were standard treatment (mainly vitamin D sterols and phosphate binders), and cinacalcet plus standard treatment. A 3.5% discount rate was applied to life expectancy (LE), quality-adjusted life expectancy (QALE), and costs and times in ranges (TiRs) recommended by the KDOQI initiative. Utilities were derived from a prospective cross sectional survey of 180 end-stage renal failure patients with and without co-morbidities. Costs were evaluated from the Italian National Healthcare Service perspective. **RESULTS:** Base case results were calculated with 10,000 iterations. Cinacalcet-treated patients had a mean (SD) increase in TiR of 5.60 (6.57), 3.45 (6.85), 1.62 (5.64) and 2.85 (5.60) discounted patient years for PTH, Ca, P, and all parameters, respectively. Mean LE extension was 1.16 (3.74) life-years and QALE increase 0.77 (2.63). The incremental cost-effectiveness ratio (ICER) calculated considering the TiR varied from €5,439 per patient-year in range to €18,748 per patient-year in range (limits for PTH and P, respectively). When considering LE, the average ICER results were €26,148/LY while when considering QALE, the average ICER was €39,454/quality-adjusted life year. **CONCLUSIONS:** Cinacalcet treatment could be considered cost-effective but further investigation is needed.

PDB26

THE PHARMACOECONOMIC STUDY OF INSULIN GLRAGINE USAGE IN ROUTINE CLINICAL PRACTICE IN RUSSIAN FEDERATION

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OBJECTIVES: To investigate the health economics outcomes of insulin glargine (GLA) usage in comparison with insulin NPH (NPH) in diabetes type-2 (DM 2) in real practice in the Russian Federation. **METHODS:** Observational study has been performed in 92 centers in 35 cities of Russia. Two goups of patients (1st- 100 pts received GLA o.d, 2d—100 pts—NPH bid) were analized for 6-months period. Group GLA had been switched previously from NPH. Efficacy was evaluated according to HbA1ñ level as target ≤7%. The performed CEA analysis included direct costs of medications based on average dosages, hospitalizations, days of disability and hypoglycemias. **RESULTS:** The duration of DM 2 was equal in both groups—above 9 years. In GLA—87% pts and in 92% NPH pts had high HbA1c at baseline, and 45% and 82% ($p < 0.001$) after the end of the study accordingly. Average daily doses of GLA at the end of the study were 32.9 UI and for NPH—34,1 UI. Hospitalization rate was higher in NPH than in GLA (1,44 vs 0,73 day/patient, $p < 0.01$), disability days (1,37 vs 0,82 days, $p < 0.05$). The CER was better for GLA vs NPH—€314 RUR and 780 RUR accordingly. Increase of additional cost was higher for NPH (23.71%) than for GLA (7.78%) per patient. **CONCLUSIONS:** GLA in DM 2 is more cost-effective in comparison with NPH due to a better efficacy and safety.

PDB27

COST-EFFECTIVENESS OF EXENATIDE VERSUS INSULIN GLARGINE FOR THE TREATMENT OF TYPE-2 DIABETES IN TURKEY: A LONG-TERM HEALTH ECONOMIC ANALYSIS

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OBJECTIVES: Type-2 diabetes mellitus (T2DM) is a progressive chronic disease placing a huge clinical and financial burden on health care services. A recent randomized open-label clinical trial (NCT00082381) comparing exenatide with insulin glargine provided evidence of the short-term clinical profile of exenatide. The objective of this cost-effectiveness analysis was to use these results as the basis for long-term projections to estimate the clinical and cost outcomes associated with exenatide treatment versus insulin glargine over a 15-year time horizon in a Turkish setting. **METHODS:** The analysis used the previously published and validated IMS Core Diabetes Model, comprised of a series of Markov-based submodels simulating the major complications of diabetes (cardiovascular, renal, eye and neurological disease). Using baseline characteristics (mean age 58.9 years; 55.7% male; mean HbA1c 8.21%; mean duration of diabetes 9.56 years), complications and concomitant medications from study NCT00082381, **analysis was performed using a non-parametric bootstrapping** approach where disease progression was simulated to estimate costs, life expectancy and quality-adjusted life expectancy (QALE). **RESULTS:** Exenatide treatment was projected to improve life expectancy (mean[SD] years: 8.41[0.09]) and QALE (mean[SD] quality-adjusted life years [QALY]: 6.00[0.07]) compared with insulin glargine (mean[SD] years: 8.38[0.08]; mean[SD] QALY: 5.62[0.06]), while also delaying the onset of diabetes-related complications (years to onset: exenatide: 4.04; insulin glargine: 4.00). Lifetime direct medical costs were higher for exenatide with a mean(SD) of 53,573(819) New Turkish Lira (YTL) compared with insulin glargine YTL 42,361(770). The incremental cost-effectiveness ratio (ICER) based on QALE for exenatide was YTL 30,018 per QALY gained versus insulin glargine. **CONCLUSIONS:** The outcome of this analysis was that exenatide treatment was projected to improve life expectancy and QALE and reduce cumulative incidence of most diabetes-related complications including cardiovascular disease, compared with insulin glargine. By current Turkish standards, the ICER for exenatide would be considered to represent good value for money.

PDB28

THE COST-EFFECTIVENESS ANALYSIS OF VIDALGLIPTIN IN TYPE 2 DIABETES IN POLAND

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OBJECTIVES: To estimate the cost-utility of vildagliptin in the treatment of diabetes mellitus type 2, in combination **with metformin, compared to the standard strategy** of treatment **in Poland: combination of metformin and sulphonylure. METHODS:** The cost-utility analysis is based **on Markov decision model (package Tree Age Pro** 2008). The following strategies of treatment were compared: **vildagliptin (50 mg twice** daily) **versus glimepiride (mean dose 4,5 mg/day) both added to metformin (mean dose** 1892 mg/day). **Direct medical costs were considered: cost of oral antidiabetic drugs** (OAD), cost of insulin, additional costs of treatment of type 2 diabetes (e.g. test strips, lancets), cost of general **practitioner, cost of specialist visits, cost of complications of** type 2 diabetes mellitus treatment. Polish cost data was used. **The units of effectiveness** in the analysis were quality adjusted life years (QALY) and life years gained (LYG). The outcome of the analysis was incremental cost-effectiveness ratio (ICER), which presents the cost of gaining one additional unit of QALY or LYG in the case of using therapy with vildagliptin instead of the comparator. Data concerning clinical effectiveness of compared interventions and also of other strategies of treatment (used after OAD treatment) were taken from RCT studies, long term studies and systematic reviews. The target population consisted of adult patients with diagnosed diabetes mellitus type 2, inadequately controlled with metformin in monotherapy. **Both payer's** perspective (National Health Fund and patient) and a lifelong time horizon were assumed in the analysis. **RESULTS:** Cost of gaining one additional unit of QALY and one additional unit of LYG in the case of using combination therapy vildagliptin+metformin instead of therapy glimepiride+metformin is 58,483 PLN and 589,575 PLN, respectively. **CONCLUSIONS:** Assuming the Polish **acceptable threshold which is 91,914 PLN, treatment with combination of vildagliptin and metformin** is cost-effective.

PDB29

PHARMACOECONOMIC CONSEQUENCES OF LOSARTAN THERAPY IN PATIENS UNDERGOING DIABETIC END-STAGE RENAL DISEASE

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OBJECTIVES: Diabetic nephropathy is a frequent and serious complication in patients with type-2 diabetes mellitus (DM), and it is the most frequent cause of End Stage Renal Disease (ESRD) in industrialized countries. The global incidence of ESRD continues to rise, and ESRD patients requires intensive and costly treatments such as dialysis or transplantation; thus, the burden of illness is growing and the resources allocated to treatment are increasing. The objective of our study was to evaluate the economic impact of losartan added to the standard care administered to diabetic subjects with End-Stage Renal Disease in Italy. **METHODS:** We conducted a cost-effectiveness analysis comparing the economic and clinical outcomes deriving from the administration of additional losartan to standard care versus standard care alone in